What is claimed is:

1. A method for use in detecting a leak in a pressurized piping system conveying a liquid, comprising the steps of:

        testing for the presence of user demand on the pressurized piping system; and

        determining whether pressure decay is present in the pressurized piping system when no user demand is present.

2. A method according to Claim 1, wherein the piping system conveying a liquid is a waterline.

3. A method according to Claim 2, wherein the waterline is a residential waterline.

4. A method according to Claim 3, wherein the testing step comprises determining whether there is a flow rate in the piping system that is greater than or equal to a preset minimal user flow rate.

5. A method according to Claim 4, wherein the minimal user flow rate is about 0.2 gallons per minute.

6. A method according to Claim 3, wherein the step of determining whether pressure decay is present comprises determining whether the pressure in the piping system has dropped below a minimum acceptable pressure.

7. A method according to Claim 6, wherein the minimum acceptable pressure is about 15 psig.

8. A method for use in detecting a leak in a pressurized piping system conveying a liquid, comprising the steps of:

        testing for the presence of user demand on the pressurized piping system;

        determining whether pressure decay is present in the piping system when no user demand is present; and

        preventing flow of liquid into the piping system when pressure decay is present and no user demand is present.

9. A method according to Claim 8, wherein the piping system conveying a liquid is a water line.

10. A method according to Claim 9, wherein the water line is a residential water line.

11. A method according to Claim 8, wherein the testing step comprises determining whether there is a flow rate in the piping system that is greater than or equal to a preset minimal user flow rate.

12. A method according to Claim 11, wherein the minimal user flow rate is about 0.2 gallons per minute.

13. A method according to Claim 8, wherein the step of determining whether pressure decay is present comprises determining whether the pressure in the piping system has dropped below a minimum acceptable pressure.

14. A method according to Claim 13, wherein the minimum acceptable pressure is about 15 psig.

15. A system useful for detecting a leak in a pressurized piping system, comprising:

    control logic;

    a user demand detector in communication with the control logic;

    a pressure decay detector in communication with the control logic; and

    a shut-off valve in communication with the control logic.

16. A system according to Claim 15, wherein the control logic is designed to close the shut-off valve whenever pressure decay is detected and no user demand has been detected.

17. A system according to Claim 15, wherein the user demand detector comprises a flow switch.

18. A system according to Claim 15, wherein the user demand detector comprises a flow meter.

19. A system according to Claim 15, wherein the pressure decay detector comprises a pressure switch.